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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/609,025

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Jae-Yong Park

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EXAMINER

DINH, TRINH VO

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,025

Applicant(s)

PARK ET AL.

Examiner

Trinh Vo Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-26 is/are allowed.
- 6) ☒ Claim(s) 1, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This is a response to request for reconsideration filed January 19, 2005. Applicant's arguments with respect to the reference *Mase* are not deemed to be persuasive. Therefore, the rejections of claims 1, 10-11 based on *Mase* are retained and repeated for the following reasons.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 remains rejected under 35 U.S.C. 102(b) as being anticipated by *Mase et al* (US 6,236,064 B1).

Mase discloses, in Fig. 1, a device, comprising a gate line (V_{gg1}) and a data line (V_{dd1}) formed over a substrate (50 in Fig. 4C), the gate and data lines perpendicularly crossing each other and defining a pixel therebetween, a first driving unit (a first complementary TFT pair) formed in the pixel and comprised of a first switching TFT (a first TFT of the first pair) and a first driving TFT (a second TFT of the first pair), a power line (col. 10, lines 65-67) delivering a current signal to the first driving TFT, an organic electroluminescent diode (6, col. 20, lines 52-54) contacting the first driving TFT and receiving the current signal from the first driving TFT, and a second driving unit (a second complementary TFT pair) formed in the pixel and comprised of a second switching TFT (a first TFT of the second pair) and a second driving TFT (a second TFT of the second pair), the second driving unit being a backup circuit that can deliver the

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current signal from the power line to the organic electroluminescent diode when the first driving unit malfunctions (col. 3, lines 19-48).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-11 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Mase in view of Prior Art (specification of the instant application).

Mase discloses substantially the claimed invention as noted above in claim 1. However, Mase does not suggest the diode including an organic layer between an anode and cathode. Prior art discloses the organic electroluminescent diode includes an anode electrode, a cathode electrode and an organic luminous layer between the anode and cathode electrodes (page 2, paragraph [0003]), the anode electrode is transparent and the organic luminous layer includes a hole transporting layer, an emission layer and an electron transporting layer in sequential order from the anode electrode (Fig. 1 of the instant application). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the diode's structure as taught in the Prior Art to Mase's device in order to improve the life span of the diode as well as the electroluminescent device.

Allowable Subject Matter

5. Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 12-26 are presently allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

The cited art of record fail to teach the first and second switching TFTs and the first and second driving TFTs are connected as defined on lines 2-15 of claim 2, or an organic electroluminescent device comprising first driving unit formed in the pixel and comprised of first and second switching TFTS and first and second driving TFTS, and a second driving unit formed in the pixel and comprised of third and fourth switching TFTS and third and fourth driving TFTS, the second driving unit being a backup circuit that can deliver the current signal from the power line to the organic electroluminescent diode when the first driving unit malfunctions as defined in claim 12.

Response to the arguments

8. With respect to claim 1, Applicant argues, in page 3 of the remarks that, in Mase col. 3, lines 19-48, the first complementary TFT pair and the second complimentary TFT pair are connected in series. Therefore, when one of the two TFT pairs of Mase malfunctions, the other TFT pair does not operate. The examiner respectfully disagrees. Mase discloses, in col. 3, lines 19-48, the two TFT pairs of Mase being connected in series. Therefore, when one of the two pairs (any one TFT of the first TFT pair) malfunctions, the other TFT pair (the two of the remaining TFTs) does compensate the operation.

In addition, the Applicant argued that Mase does not teach the second driving units acts as a back up circuit when the first driving unit malfunctions. The Examiner respectively disagrees. As disclosed in Mase, col. 3, lines 19-48, “when any one of the four TFTs malfunctions, the remaining TFTs compensate for the operation”. For instance, first and second TFTs of Mase form a first driving unit, and third and fourth TFTs form a second driving unit. Mase discloses “the second driving unit (the third and the fourth TFTs are two of the remaining TFTs) being a backup circuit when the first driving unit (the first or the second TFT of Mase) malfunctions. Note that the claimed recitation “the first driving unit malfunctions” does not necessarily means or includes both transistors being malfunction; Therefore, Mase’s teaching of any one of transistors in the first driving circuit malfunctions anticipates the claimed limitation of “the first driving unit malfunctions”. Since Mase teaches every features of the claimed invention, claim 1 is anticipated by the reference. Therefore, 102 rejection of claim 1 is retained and proper.

With respect to the rejections of dependent claims 10-11, which employing the additional teaching of Mase and the prior art, Applicant has not offer any specific argument thereagainst. Accordingly, no further comments concerning the rejections of the dependent claims are necessary.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Vo Dinh whose telephone number is (571) 272-1821. The examiner can normally be reached on Monday to Friday from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*Trinh Vo Dinh
February 02, 2005*